

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A lithographic printing original plate having a photosensitive layer formed on a support,

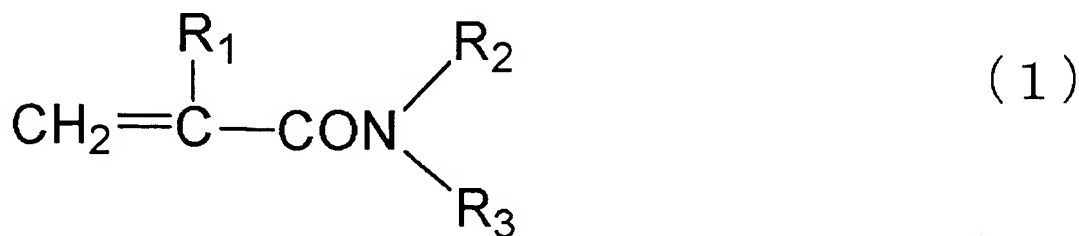
wherein the photosensitive layer comprises the heat cured product of a photosensitive resin composition,

wherein the photosensitive resin composition comprises a hydrophilic resin having cross-linking groups that can react with a cross-linking agent, a hydrophilic resin having no functional groups that can react with a cross-linking agent, a melamine resin, organic fine particles and a photothermal conversion material,

wherein the hydrophilic resin having cross-linking groups that can react with a cross-linking agent is obtained by polymerizing a monomer containing a cross-linking monomer having a hydroxyl group, and

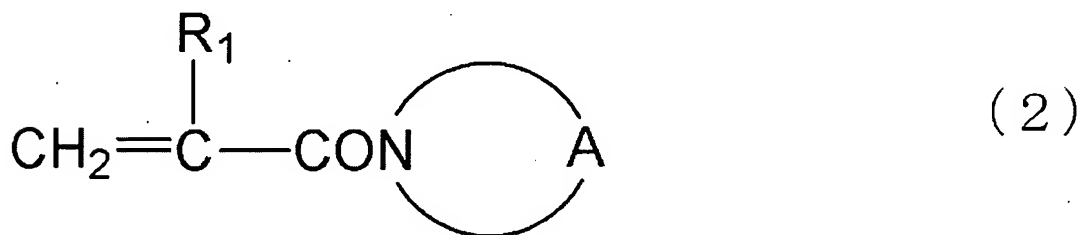
wherein the hydrophilic resin having no functional groups that can react with a cross-linking agent is obtained by polymerizing at least one monomer containing a N-alkyl or N-alkylene substituted (meth)acrylamide compound selected from the group consisting of monomers represented by formulae (1) and (2),

formula 1



wherein R₁ represents a hydrogen atom or a methyl group, and R₂ and R₃ each individually represents a hydrogen atom or a lower alkyl or alkoxy group,

formula 2



wherein R₁ represents a hydrogen atom or a methyl group, and A represents (CH₂)_n, and wherein n represents an integer of 4 to 6 or (CH₂)₂O(CH₂)₂

~~wherein the surface of the photosensitive layer forms a phase separation structure, and when the lithographic printing original plate is subjected to printing using a fountain solution, a portion derived from either one of the components that constitute the phase separation on the surface of the printing plate after printing produces recessed parts on the surface of the photosensitive layer and the surface of the photosensitive layer has a property to be changed to have affinity for ink by irradiation with light or thermal energy.~~

2. (Currently Amended) A lithographic printing original plate according to claim 1, wherein the photosensitive layer has a ~~the~~ phase-separation structure ~~is~~ in a sea-island form, there are at least five island portions having a diameter of 0.5 μm or more to 10 μm or less in an area of 2,500 μm² on any surface of the photosensitive layer, wherein the diameter means a

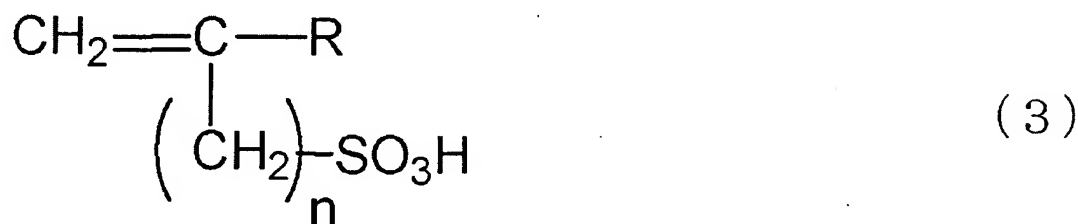
short axis when the island portion has an elliptic shape with a long axis and a short axis, and at least a part of the island portions produces recessed parts on the surface of the lithographic printing original plate after printing when the plate is subjected to printing using a fountain solution.

3. (Original) A lithographic printing original plate according to claim 2, wherein the mean value of the short axes of the island portions is 0.5 μm or more to 10 μm or less.

4. (Cancelled)

5. (Currently Amended) A lithographic printing original plate according to [[claim 4]] claim 1, wherein the hydrophilic resin having no functional groups that can react with a cross-linking agent is obtained by further reacting [[further]] one or more kinds of compounds selected from [[the]] compounds having following general formula (3) [[and/or]] or salts thereof:

[formula 3]



[[, wherein,]] wherein R represents a hydrogen atom or a lower alkyl group; n represents an integer of 1 to 8.

6. (Cancelled)

7. (Cancelled)

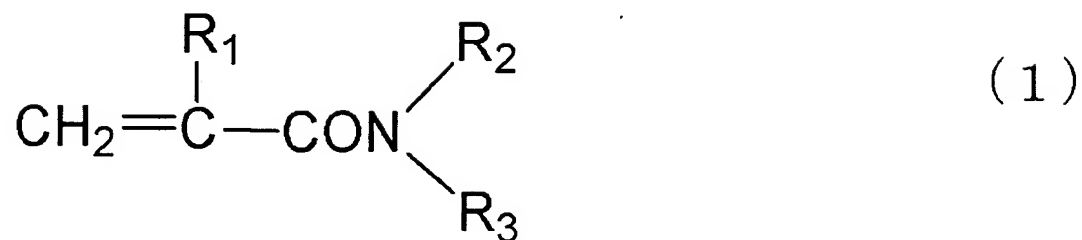
8. (Original) A lithographic printing plate that is obtained by irradiation with light or thermal energy to the lithographic printing original plate according to claim 1.

9. (Currently Amended) A photosensitive resin composition [[containing]]
comprising:

~~a hydrophilic resin obtained by reacting a N-alkyl or N-alkylene substituted (meth)acrylamide compound represented by following general formula (1) and/or 2 and a hydrophilic resin having cross linking groups that react with at least a cross linking agent, which further contains a cross linking agent and a photothermal conversion material for cross-linking, having cross-linking groups that can react with a cross-linking agent, obtained by polymerizing a monomer containing a cross-linking monomer having a hydroxyl group,~~

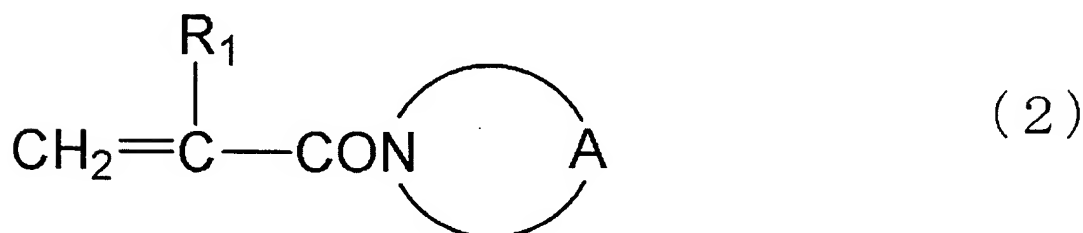
a hydrophilic resin for non-cross-linking, having no functional groups that can react with a cross-linking agent, obtained by polymerizing at least one monomer containing a N-alkyl or N-alkylene substituted (meth)acrylamide compound selected from the group consisting of monomers represented by formulae (1) and (2),

formula 1



wherein R₁ represents a hydrogen atom or a methyl group, and R₂ and R₃ each individually represents a hydrogen atom or a lower alkyl or alkoxy group,

formula 2



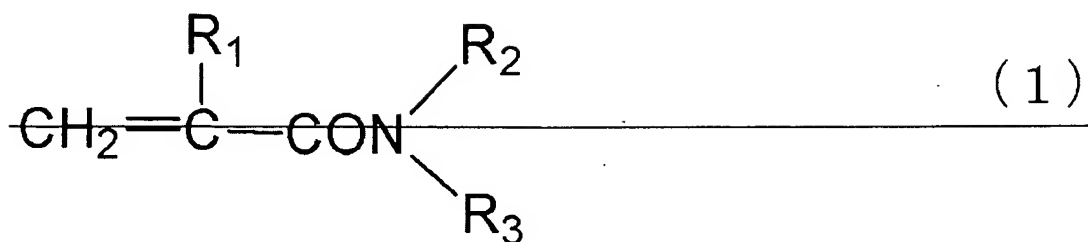
wherein R₁ represents a hydrogen atom or a methyl group, A represents (CH₂)_n, and n represents an integer of 4 to 6 or (CH₂)₂O(CH₂)₂,

a melamine resin,

organic fine particles, and

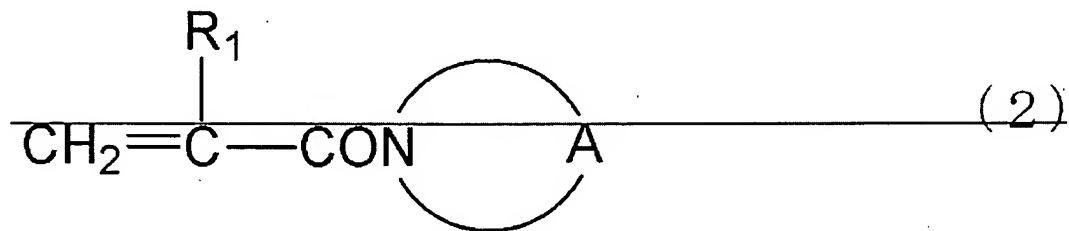
a photothermal conversion material

~~{formula 4}~~



~~, wherein, R₁ represents a hydrogen atom or a methyl group; R₂ and R₃ represent a hydrogen atom or a lower alkyl or a lower alkoxy group.~~

~~{formula 5}~~



~~wherein, R₁ represents a hydrogen atom or a methyl group; A represents (CH₂)_n, wherein n represent an integer of 4 to 6 or (CH₂)₂O(CH₂)₂.~~

10. (Cancelled)